

IN THE DRAWINGS

Please cancel sheets 1-6 of the formal patent drawings, as filed, and consisting of Figs. 1-6. Please substitute therefor Replacement Sheets 1-6, also consisting of Figs. 1-6. Please also add New Sheet 7 consisting of new Fig. 7.

REMARKS

Applicants, their principal attorneys in Germany, and the undersigned have carefully reviewed the Final Office Action of September 28, 2007 in the subject U.S. patent application, together with the prior art now cited and relied on in the final rejections of the claims. In response, a Request for Continued Examination (RCE) is being filed concurrently to provide further opportunity to advance the prosecution of the subject application. It is believed that the claims now pending in the application are patentable over the prior art cited and relied on, taken either singly or in combination. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

In the Final Office Action of September 28, 2007, the drawings were objected to as failing to show every feature of the invention specified in the claims. It was asserted that "said spur cylinder and having a plurality of spur needles" and "at least one deflector on said spur cylinder and having a deflector strip," both as recited in claim 17, were not shown in the drawings. While respectfully traversing the Examiner's position in this regard, there is also being submitted herewith a proposed New Sheet, sheet 7 of the drawings. This new sheet clearly shows the features asserted in the Final Office Action as being missing from at least claim 17. Since the initially submitted six sheets of formal drawings were labeled as sheets 1/6, 2/6, 3/6, 4/6, 5/6 and 6/6 respectively, the presentation of New Sheet 7 makes the prior sheet numbering incorrect. The six Replacement Sheets are now identified as sheets 1/7, 2/7, 3/7, 4/7, 5/6 and 6/7, respectively. No other changes to those sheets have been made. As will be discussed below, New Sheet 7 does not add any new matter but merely further depicts what is already depicted, at least schematically in the originally filed drawings and described in the Substitute Specification, as filed.

As may be seen in Figs. 4, 5 and 6 of the drawings, the spur cylinder 18 has three spur needle strips 08, 09 and 11. Spur cylinder 18 also is provided with deflectors 21, 22 and 23, each one of which is assigned to a respective one of the spur strips 08, 09 and 11. This is set

forth in paragraph 020 of the Substitute Specification. Each of these deflectors is described as a strip-shaped sheet metal piece, also in paragraph 020. As may be seen in Fig. 6, and as is also described in paragraph 020, and also in subsequent paragraphs, each of the deflectors has an inclined face 24. In Fig. 6 specifically, the deflector 22 is depicted in its use position in which its inclined face 24 overlies the spur strip 08.

It is noted that the Substitute Specification used the phrase "inclined face" to describe the element 24 and that in claim 17 this inclined face is recited as a deflector strip. In order to provide uniformity of terminology, the Substitute Specification has been amended to recite "inclined face" or "deflector strip" as alternate terminology for the element 24 of the deflector 21, 22 or 23.

In newly presented Fig. 7 of the drawings, there is shown, in a perspective view, the relevant portion of the subject invention, as depicted in originally filed Fig. 6. The spur cylinder 18 and the folding jaw cylinder 02 are depicted. The deflector 22 with its inclined face or deflector strip 24 is depicted. The spur needle strip 08 is depicted. Since the drawing objection indicated that the drawing must show a plurality of spur needles, these are now shown at 10. The Substitute Specification has been amended, at several locations, to include the reference numeral 10.

It is respectfully submitted that new Fig. 7 does not add any new matter. Its perspective view shows elements that are also visible in Fig. 6. The provision of a plurality of spur needles 10 on a spur strip 08 is described in various locations in the Substitute Specification. Such spur strips with spur needles are very well known in the art. The schematic depiction of pins 50 in the prior art Jackson patent is evidence of the conventional use of spur strips with spur needles in sheet leading end holding devices. The use of these spur needles to hold the leading end of a second sheet 17, while a first sheet 16 is being moved in a retrograde direction, all as depicted in Fig. 6, is also shown in newly presented Fig. 7. As was asserted at the start of this discussion, it is the belief of the undersigned that the objection to the drawings was

unwarranted. It is most strenuously asserted that the addition of new Fig. 7 and the changes necessitated to the specification, in view of the addition of new Fig. 7, do not add any new matter. Entry of this new drawing figure and these proffered changes to the Substitute Specification are respectfully requested and are believed to be fully responsive to the Examiner's objection the drawings.

Turning now to the substantive portion of the Final Office Action of September 28, 2007, claims 17, 19, 20, 22, 23 and 25-29, all of the claims then pending in the application, were rejected under 35 USC 103(a) as being unpatentable over U.S. patent No. 6,843,763 to Jackson in view of U.S. patent No. 4,790,804 to Gotou. It was asserted that Jackson discloses the claimed folding apparatus, as depicted in Fig. 2 except for the deflector in the spur cylinder, the means for moving the deflector to cover the spur needles and further except for the moving of the deflector strip from a retracted position to an extended position. Gotou was asserted as showing a similar apparatus teaching the use of a deflector extending radially upwardly and means for moving the deflector to cover the spur needles. Gotou was also asserted as disclosing means to move the deflector strip from a retracted position during passage of the spur strip through a gap to an extended position covering the spur needles, as shown in Figs. 3, 4 and 6. For the reasons to be set forth below, the undersigned respectfully but strongly disagrees both with the asserted combination advanced by the Examiner and with the Examiner's characterization of the Gotou reference as a "similar" apparatus.

The Jackson reference was cited and relied on in the Office Action of July 10, 2007. It was discussed in detail in the Second Amendment filed August 23, 2007 and specifically starting at the top of page 14 thereof. It was also discussed in detail during the interview held August 22, 2007. While it shows the use of a spur cylinder with pins and a cooperating folding jaw cylinder, it does not teach, or suggest the presence of the structure of the deflector in accordance with the present invention and as recited in currently amended claim 17.

The newly cited secondary reference to Gotou, U.S. patent No. 4,790,804 is rather casually categorized as "...a similar apparatus...". It is assumed that this is intended to indicate that Gotou is somehow similar to Jackson for the purpose of combining the two. In fact, there is very little that is similar about the two. It is not at all clear that the teachings of the two could be combined. Even if they could, the resultant device would not render obvious the structure of the subject invention, as recited in currently amended claim 17.

Jackson is directed to a folding cylinder that includes sheet leading end pins 50 and sheet folding blades 64. It "...relates generally to printing presses and more particularly to a folder of a printing press." (Column 1, lines 6 and 7.) Its purpose is to grip the leading end of an endless web 100 while that web is cut transversely by a cutting blade 42 into signatures 102, and to hold the signatures while they are transversely folded by the cooperation of a folding blade or tucker 46 and a jaw 48 on a jaw cylinder 36, all as seen in Fig. 2 of Jackson.

The Gotou device, in marked contrast, is directed to a paper bag making device. It includes a rotatable cylinder, as does Jackson, but apart from that similarity, it is completely different in its structure and operation. Referring initially to Fig. 8, there is shown a pre-cut paper sheet 5. That sheet, which will ultimately form a side of a shopping bag, has a lapel 2 at its upper edge. That lapel 2 has a series of cut-outs or scalloped areas at 2a which, when the lapel 2 is folded down onto the surface of the body of the paper sheet 5, will allow the passage of handle carrying cords 3. Each such handle carrying cord 3 is somewhat D-shaped and includes a bridge piece 4. Once the lapel 2 has been folded down into the orientation depicted in Fig. 9, the bridge pieces 4 extend along the fold line, shown in dashed lines in Fig. 8 and provide reinforcement for the handle carrying cords 3 so that they do not rip out of the bag.

The purpose of the device described in Gotou is to fold the lapel 2 down onto the body of the bag, as provided by the paper sheet 5, while capturing the bridge pieces 4 in the so-formed fold. In a sequence of operational steps, which start in Fig. 3, the sheet 5, with its handle 3 properly positioned, is laid onto the surface of cylinder 11. A holding pawl 12 is caused to open

and a folding blade 27 is caused to move radially toward the interior of the cylinder 11. This movement, in combination with an opening of the holding pawl 12, causes a portion of the paper sheet 5, generally along the fold line depicted in Fig. 8, to move radially into the cylinder. This is depicted in Fig. 4.

As seen in Fig. 5, the holding pawl 12 again closes and forms the fold line between the paper sheet 5 and the lapel 2. At this point, a depressing pawl, generally at 17, moves in an arcuate path so that its free end engages the lapel 2 and folds it over onto the paper sheet 5, as depicted in Fig. 6 and as seen more clearly in Fig. 7. Once the lapel 2 has been so folded over, and is held in place by a previously-applied adhesive, the depressing pawl returns to its original position.

The Gotou reference does not show or suggest spur needles. It does not show, or suggest a deflector that extends to a spur needle covering position. If Gotou could be combined in any way with Jackson, it would have to take the place of the jaw cylinder 36 of Jackson. Gotou shows a folding jaw at 12 with a cooperating folding blade at 22 and 23. The asserted deflector of Gotou is, in fact, a depressing pawl whose sole purpose is to press the folded over lapel 2 against the paper sheet 5 with sufficient force to allow the two to be bonded together using an adhesive.

In the Gotou reference, the depressing pawl is coordinated, in its extension and retraction, to work with the folding blade. It does not operate with respect to any portion of the cylinder 11 in cooperation with another cylinder, such as a folding jaw cylinder. Gotou does not recite the provision of any cooperating cylinder and clearly does not discuss the extension or the retraction of the depressing pawl 17 as a function of passage of spur cylinder spur strip needles through a transfer gap. The folding blade of Gotou is recited as being carried by a holder 23 which is, in turn, connected to a rotational shaft 24. There is no discussion of any support for that shaft 24. It is clearly not part of a cooperating cylinder.

For all of these reasons, it is believed that Gotou is not combinable with Jackson. The two devices are not “similar” irrespective of the Examiner’s unsupported assertion. Further, Gotou does not show, or suggest a cylinder of the type shown as the transfer cylinder 34 of Jackson. If the two references are at all combinable, Gotou would be more appropriately used as the jaw cylinder 36. It has a fold forming jaw, provided by the holding pawl 12, and cooperates with a separate fold-forming blade 22. As seen in Fig. 4, the blade forms the fold by pushing the paper sheet into the opening defined by the holding point 12.

Claim 17, as it is presently amended, recites the provision of a spur cylinder and a cooperating folding jaw cylinder. The spur cylinder has at least one spur strip with a plurality of spur teeth. All of this is generally well known in the art. Claim 17 further recites the provision of at least one deflector on the spur cylinder and having a deflector strip. Although the Gotou structure looks somewhat similar, its function and purpose is very different. As recited in currently amended claim 17, the deflector strip is usable to selectively cover and to expose the spur needles on the spur needle strip. In the Gotou device, the depressing pawl, which the Examiner has asserted is similar to the deflector of the subject device, in fact is a folding implement. It does not shield or cover a spur needle strip. Its sole purpose is to engage a label portion 2 of a paper sheet 5 and to fold that label portion over pre-formed bag handle-carrying cords. Even if Gotou were combinable with the primary Jackson reference, as discussed above, it would be analogous to the jaw cylinder 36 of Jackson.

Claim 17 of the subject application, as currently amended, recites that the deflector strip is extended and retracted on the spur cylinder, in relation to the position of its associated spur needles strip with respect to the transfer gap defined by the spur cylinder and the folding jaw cylinder. Again, the Gotou reference is silent as to any suggestion of such a relationship or cooperation. In Gotou, the cylinder 11, on which the paper sheet 5, which will become part of a shopping bag, is placed, is rotatable. The only discussion in Gotou of a positional cooperation between the depressing pawl 17 and the circumference of the cylinder has to do with the

movement of the folding blade 22 and the associated folding blade holder 23, as depicted in Fig. 4. At that point in time, the depressing pawl 17 has been retracted so that the blade can push the paper sheet, along its intended fold line, into the folding gap. Once the folding blade has been retracted, the depressing pawl, as its name implies, depressed the lapel portion 2 of the paper sheet 5 against the remainder of the paper sheet 5. There is no suggestion in Gotou of any cooperation with another cylinder. As discussed above, any cooperation with another cylinder, that could possibly be taught by a Jackson/Gotou combination, would be if Gotou were used as the jaw cylinder 36 of the Jackson device. This is the only logical place to locate it, since it cooperates with a folding blade, such a folding blade being located on the transfer cylinder of Jackson, which transfer cylinder is analogous, in function to the spur cylinder of the subject invention.

Claim 17 even further defines the deflector strip of the subject invention as shielding the associated spur needle strip from the released leading end of a prior signature during retrograde movement of that prior signature leading end along the spur cylinder circumferential shell. Gotou clearly does not even remotely suggest such a structure or function.

The mere fact that the depressing pawl 17 of Gotou appears visually somewhat similar to the deflector of the subject invention and that it is carried on a cylinder is not sufficient to make it a relevant reference. There has to be at least some suggestion, other than the Examiner's hindsight, that the proposed combination is plausible. In the current rejection, as has been quite clearly pointed out in the preceding discussion, there is no support for the combination suggested by the Examiner. Any such possible combination would still not function in a manner to accomplish the results set forth in currently amended claim 17. It is thus believed that claim 17 is allowable.

The remainder of the claims now pending in the application are all dependent on believed allowable claim 17. They are thus also all believed to be allowable. Their language has

been further amended to bring it into agreement with the language of currently amended claim
17.

SUMMARY

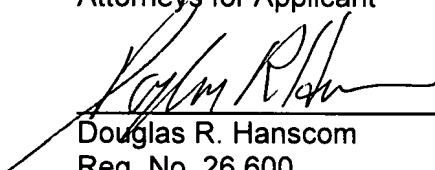
New drawing sheet 7 has been added in response to the Examiner's objection to the drawings. The Substitute Specification of the application has been amended to recite the addition of Fig. 7. These changes do not constitute any new matter, for the reasons set forth in the body of this Third Amendment. The claims now pending in this application have been further amended in an earnest effort to place the application in condition for allowance. A Request for Continued Examination has been filed to provide the time for the Examiner to fully consider these newly amended claims and the accompanying discussion.

Allowance of the claims and passage of the application to issue is respectfully requested.

Respectfully submitted,

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